STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street, Baltimore, Maryland 21201

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Office of Preparedness & Response
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December 7, 2007
Public Health & Emergency Preparedness Bulletin: # 2007:48
Reporting for the week ending 12/01/07 (MMWR Week #48)

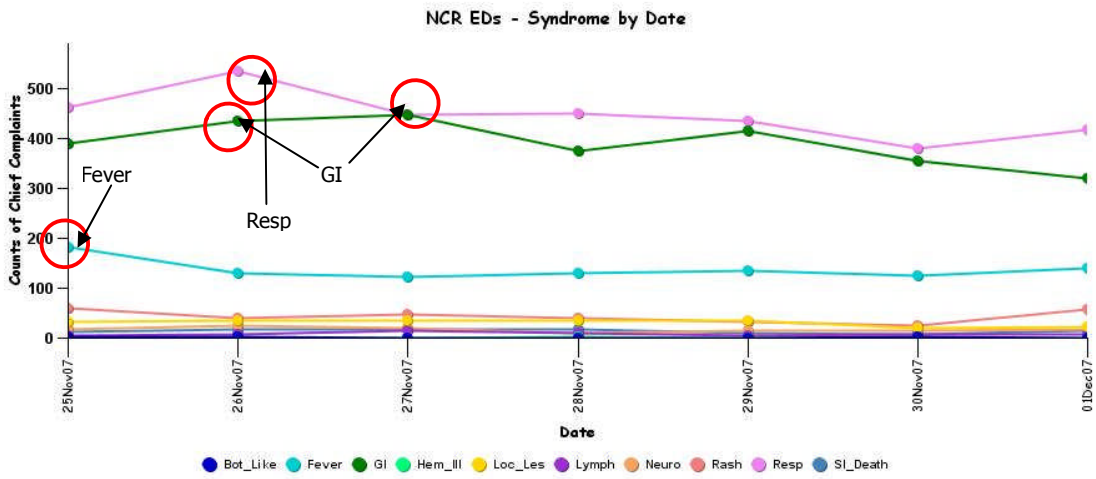
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

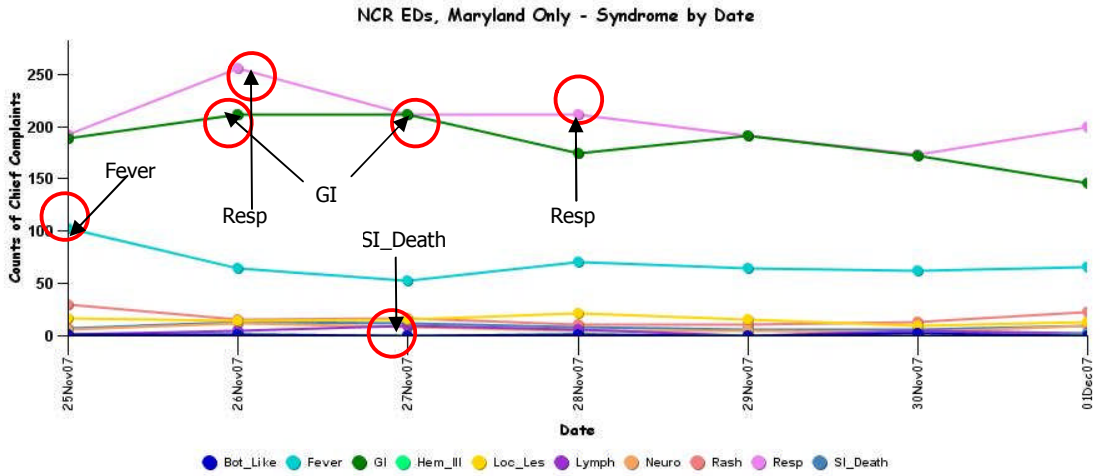
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

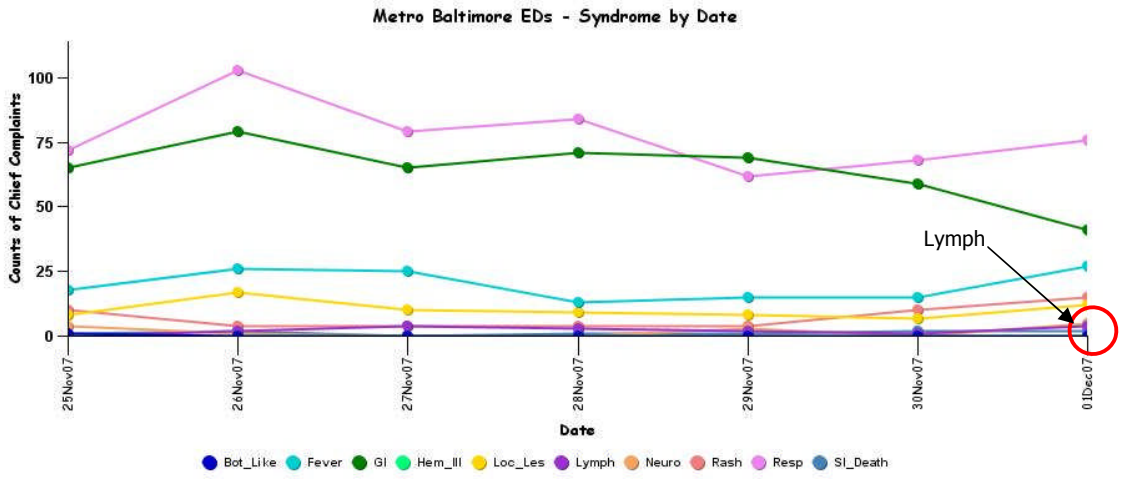
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system

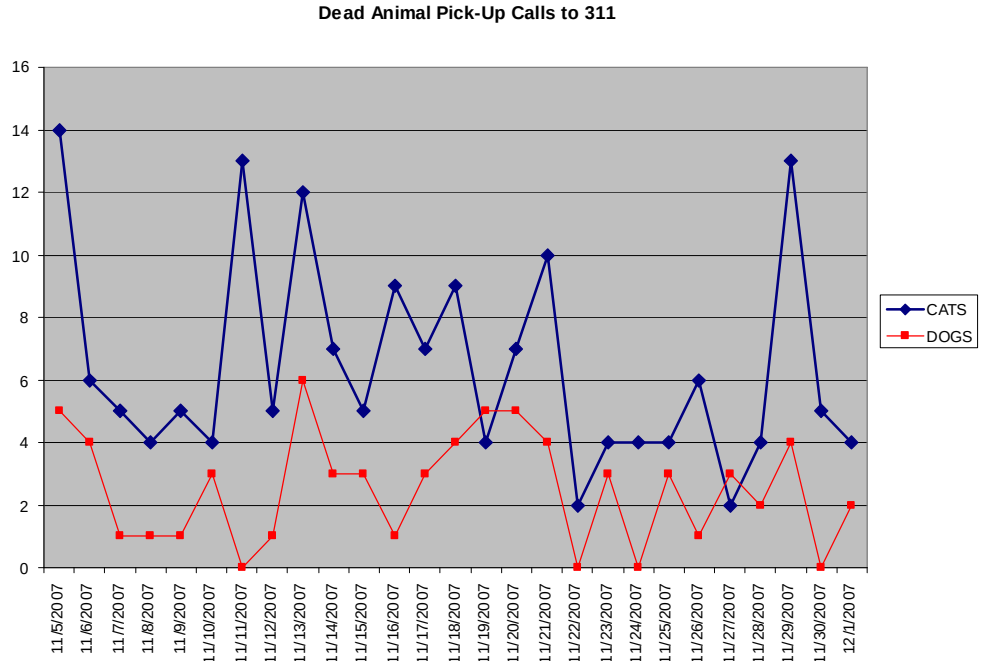


* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



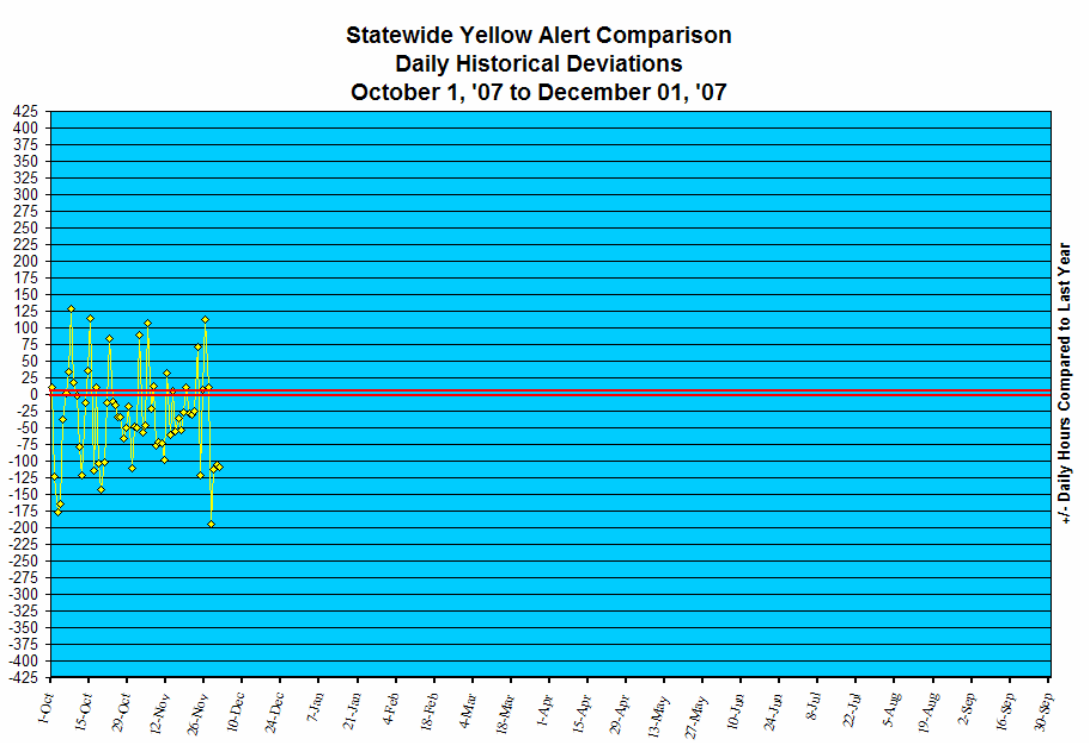
* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.



REVIEW OF MORTALITY REPORTS

OCME: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in October 2007 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases:	12	0
Prior week:	12	0
Week#48, 2006:	11	-

OUTBREAKS: 4 outbreaks were reported to DHMH during MMWR Week 48 (Nov. 25- Dec. 1, 2007):

2 Gastroenteritis outbreaks
2 outbreaks of GASTROENTERITIS associated with Nursing Homes

1 Rash illness outbreak
1 outbreak of CHICKENPOX associated with a School

1 other outbreak
1 cluster of BACTEREMIA associated with a Hospital

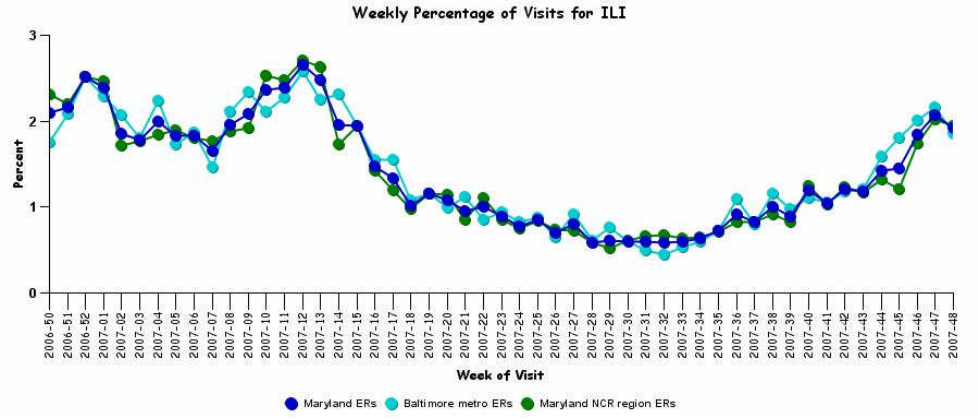
MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May. Four suspected cases of influenza were reported to DHMH during MMWR Week 48 (November 25 – December 1, 2007). ****The first lab confirmed case of influenza in Maryland was reported December 5, 2007****

*Please note: Influenza data reported to DHMH through the National Electronic Disease Surveillance System (NEDSS) is provisional and subject to further review.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

WHO update: As of December 4, 2007, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 336, of which 207 have been fatal. Thus, the case fatality rate for human H5N1 is about 61%.

AVIAN INFLUENZA (Burma): 26 Nov 2007, Officials in Burma say a new outbreak of bird flu has been detected among chickens in an eastern district near the Chinese border. The state-run New Light of Myanmar newspaper said on Nov 24 that the outbreak was found at a farm in Kentung township in eastern Shan state on Nov 18, after a farmer reported an unusual number of deaths in his chickens. Officials culled an unknown number of birds at the farm. A statement from the Myanmar Livestock and Veterinary Department urged people to prevent the entry of poultry and birds from neighboring countries into Burma.

AVIAN INFLUENZA (Romania): 28 Nov 2007, Romania discovered an outbreak of the deadly H5N1 avian flu virus in the Danube river delta at a small farm on Nov 28, officials said. The head of the National Sanitary Veterinary Agency (ANSV), Radu Roatis, said tests taken on samples from the dead birds revealed the presence of the H5N1 virus. "The suspicion for H5N1 was confirmed by the national laboratory. We discovered the virus in hens and ducks," Roatis said.

AVIAN INFLUENZA (Saudi Arabia): 28 Nov 2007, Saudi Arabia's agriculture ministry on Nov 28 said 2 new cases of avian influenza were detected at separate egg production facilities in the capital Riyadh. The Saudi Press Agency quoted the ministry as saying that the H5N1 outbreaks occurred at the Thadiq and Kharj governorates. The agriculture ministry, together with the interior ministry, hospitals and local governments in the affected region, killed all birds at the 2 sites. The facilities were also cleaned before these were closed down. The ministry ordered poultry breeders and producers from the 2 facilities to take measures to prevent the spread of the disease by making sure that migrating birds don't enter sheds, storage of fodder or drinking and cooling water. Owners of poultry farms and residents are urged to report suspicious cases through a toll-free hotline or to the nearest branch of the agriculture ministry. Some 50,000 birds were also culled from the same areas early in November due to similar bird flu outbreaks.

NATIONAL DISEASE REPORTS:

E. COLI O157, GROUND BEEF (Multi State): 26 Nov 2007, American Foods Group, LLC, a Green Bay, WI, firm, is voluntarily recalling approximately 95,927 pounds of various coarse and fine ground beef products because they may be contaminated with E. coli O157:H7, the US Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS) announced on Nov 24. Each shipping label bears the establishment number "Est. 18076" inside the USDA mark of inspection. The products subject to recall were distributed for further processing and repackaging and will not bear the recalling firm's establishment number on the package. As the use-by date for products subject to this recall may have expired, consumers can contact their retailers to ask if they received any of these products and if so, consumers are urged to look in their freezers for these products and return or discard them if found. The ground beef products subject to recall were produced on Oct 10, 2007, and were distributed to retail establishments and distributors in Indiana, Kentucky, Maryland, Ohio, Tennessee, Wisconsin, and Virginia. The problem was discovered through an investigation into 2 illnesses that was initiated by the Illinois Department of Public Health. Anyone concerned about an illness should contact a physician. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

HANTAVIRUS (New Mexico): 1 Dec 2007, The New Mexico Department of Health announced today that a 34-year-old man from McKinley County was diagnosed with the state's third case of hantavirus pulmonary syndrome this year. The man was hospitalized and is now recovering at home. "People are usually exposed to hantavirus around their homes, especially when they clean out enclosed areas that have lots of mouse droppings," said Dr. Paul Ettestad, the Department of Health state public health veterinarian. Hantavirus causes a deadly disease transmitted by infected rodents through urine, droppings or saliva. People can contract the disease when they breathe in aerosolized virus. The deer mouse is the main reservoir for hantavirus in New Mexico. The Department urges health care workers and the general public to familiarize themselves with the symptoms of hantavirus infection. Early symptoms of hantavirus infection are fever and muscle aches, possibly with chills, headache, nausea, vomiting, diarrhea, abdominal pain and cough. Symptoms develop one to 5 weeks after rodent exposure. Although there is no specific treatment for hantavirus infection, chances for

recovery are better if medical attention is sought early. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

ANTHRAX, BOVINE (Israel): 25 Nov 2007, On Nov 19, 2 heifers out of a herd of 120 cows grazing on a lot in the Lachish area died. The spleen of one of them was submitted to the Dept. of Clinical Bacteriology and Mycology at the Kimron Veterinary Institute, and Bacillus anthracis was isolated from it. The carcasses of both heifers were burnt and buried. An additional heifer died on Nov 20, and again B. anthracis was isolated from its ear. Identification was made by morphological and biological characteristics and PCR. Since the Lachish region, located in the center-south of Israel, is endemic for anthrax, the herd was vaccinated about 6 months ago. The last outbreak was in 2004, and a single case was diagnosed in 2005 in the same herd. The herd currently involved grazed in a different area on higher ground than the one affected in 2004 and 2005, which had grazed in the riverbed. Following the new cases, the herd was revaccinated on Nov 21 and moved to another pasture. No further cases were observed by Nov 25. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA, SUSPECTED (Indonesia): 26 Nov 2007, The illness chikungunya attacked several areas in the City and the Bogor Regency in the last 2 weeks (weeks of Nov 11 and 18). Hundreds of residents were reported to be infected by the illness that was spread by mosquitoes. From information that was received by Pikiran Rakyat newspaper, on Nov 25, dozens of villagers of Loji Kota Bogor have been infected by the chikungunya virus. In the Bogor Regency, the same plague attacked hundreds of residents in 2 sub districts, namely the Ciampea Subdistrict and Darmaga. In the Ciampea Subdistrict, chikungunya spread in Bojongrangkas village, Cihideung Ilir, and Cinangneng, affecting residents there. In the Darmaga Subdistrict that neighbors the Ciampea area, approximately 60 people were affected by chikungunya. Officially, Kesehatan of the Bogor Regency determined that there was an Extraordinary Incident emergency in the Ciampea territory after dozens of residents were affected by chikungunya. The head of the Pencegahan Field of the Eradication of the Illness and the Health of the Environment (P2PKL), Regional Health Service, Bogor, Dr. Eulis Wulandari, with the official of the local community health centre, reported carrying out inspections and mass medical treatment of the residents. After having received the report, we at once acted to identify this illness by checking and taking 10 samples of blood from the sufferers, they said. However, to confirm whether they were affected by chikungunya or not, we are still awaiting results of the tests on the blood that was sent by us to Jakarta, he said. Eulis also said, based on symptoms seen in the sufferers, they were indeed suspected to be ill with chikungunya. The test results usually are available in 2 weeks. So, seeing that the number of sufferers is so many, we determined that the illness in this area is an extraordinary incident, he said. Dirty water channels in and around residents' housing fosters mosquito breeding, said Bambang, who noted a lack of health education to remind residents of the importance of the health of the environment. At this time, the number of residents infected numbers approximately 60 people, and the possibility is that the number of sufferers could increase, said Bambang. In the meantime, 17 sufferers of chikungunya in the area of the Loji Subdistrict, Kota Bogor, gradually recovered. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, UNIVERSITY (Canada): 27 Nov 2007, The number of people hit by salmonella food poisoning at the University of Western Ontario has jumped by another 8 confirmed cases, the Middlesex-London Health Unit reported on Nov 26. With the latest laboratory tests, the total sickened now officially stands at 85. The jump in cases followed a quiet weekend in which no new cases were reported. At least 5 students have been hospitalized from the illness. Dozens more students have reported symptoms consistent with salmonella food poisoning, but haven't been tested. The health unit is no longer releasing statistics on those cases, said associate medical officer of health Dr Bryna Warshawsky. The outbreak has been linked to the Pita Pit fast-food outlet at the university's community center, which was shut down and sanitized before reopening. It will be later this week before the health unit can determine if the cleanup eliminated the salmonella bacteria. Warshawsky said she anticipates there will be more lab-confirmed cases as the health unit encourages students who have been ill to submit stool samples for testing. An online survey of students who ate at the Pita Pit is being conducted on the university's website by the health unit in an effort to pinpoint the cause of the salmonella contamination. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

YERSINIOSIS, SAUSAGES (New Zealand): 28 Nov 2007, Canterbury's Medical Officer of Health is urging people to thoroughly heat cocktail sausages before eating them following an outbreak of an illness among children who had consumed them. Dr Ramon Pink says cocktail sausages (also known as cheerios or saveloys) should be heated before they are eaten and should not be offered cold to children at butcher shops or delicatessens. An investigation by the Canterbury District Health Board's Community and Public Health division has found 6 children under 5 years old with yersiniosis had eaten cocktail sausages. Symptoms of the infection usually last about 48 hours and include diarrhea, possibly stomach pains, but usually no vomiting. Most of the children lived in the south Christchurch area and the suspected food was purchased in this area. The problem appears to have occurred from mid October to early November 2007. It is believed more people, particularly children, could have been affected by the illness. The cocktail sausages were given to most of the children over the counter, a common practice, which has been associated with outbreaks of Salmonella and Campylobacter in Christchurch in the past. While cocktail sausages are cooked during their preparation they are not ready-to-eat foods. Further heating before eating is required to destroy any bacteria that may have

contaminated them after they were made. As the scale of the outbreak is unknown, Dr Pink says anyone who has eaten cocktail sausages purchased from the south Christchurch area during October-November 2007 and has developed diarrhea and possibly stomach pains should contact a Community and Public Health Protection Officer. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA (Mozambique): 28 Nov 2007, Health authorities in the central Zambezia province in Mozambique were on high alert after the deaths last week of 2 people out of more than 20 reported cases of cholera, the daily Noticias reported on Nov 27. It was reported that health authorities in the Chire region of Morrumbala district had increased the amount of diagnostic equipment used in the treatment of cholera in the districts of the province located near the Malawian border. In October 2007, health authorities reported the death of 2 people in the same province, while another 6 were hospitalized in the same district. Authorities blamed the occurrence of the transmittable disease on the consumption of contaminated water. Cholera outbreaks had often been reported in Mozambique's rural and urban centers during the rainy season, which began in November 2007. Health officials were encouraging residents to boil or treat their water before drinking it or using it to wash vegetables and fruit. In southern Mozambique, **f**our people have died out of the 222 cases of cholera diagnosed in Maputo city and province since the current outbreak began in October 2007, according to Mozambican Health Minister Ivo Garrido. "If we do not remain on maximum alert, then the number of cases may increase, and we may lose many more lives," warned Garrido. He stressed that all people suffering from severe diarrhea and vomiting, the main symptoms of cholera, should be taken urgently to the nearest health post. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA, SUSPECTED (Indonesia): 28 Nov 2007, Last week (Nov 19-25), the illness with signs similar to chikungunya spread in Purwahamba Village, Kecamatan Suradadi, Tegal, Central Java. This illness mostly attacked children. The sufferers of chikungunya generally experienced high fever accompanied by joint pain. A month ago, this similar illness attacked villagers in Dukuhwaringin Utara, a distance around 20 km from Purwahamba Village. Although chikungunya disease has spread, the Health Service of the Tegal Regency just now found out about this plague. The plan is, tomorrow the officials of the health agency will fog this village. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

GLANDERS, EQUINE (Iran): 29 Nov 2007, A horse that was illegally imported from Iraq to Iran was confirmed positive for glanders, according to a Nov 13 release from the Office International des Epizooties/World Organization for Animal Health (OIE). The disease was found during a routine screening test. The horse, which did not show clinical signs of the disease, was euthanized. Glanders was last reported in Iran in 2001. The OIE report was submitted by Mojtaba Noorouzi, head of the Iran Veterinary Organization. Glanders is caused by the bacteria Burkholderia Pseudomonas mallei. The contagious disease is characterized by nodules, abscesses, and ulcers in the respiratory tract and skin. Affected horses can die within a few days. According to the Merck Veterinary Manual, Glanders is one of the oldest diseases known. It used to be prevalent worldwide. Glanders is considered a foreign animal disease in the United States. The disease has been eradicated from many countries, including the United States, Canada, and Western Europe. It is transmissible to people and is often fatal. (Glanders is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

EBOLA HEMORRHAGIC FEVER, CONFIRMED (Uganda): 30 Nov 2007, The Ministry of Health (MoH), Uganda, has confirmed an outbreak of Ebola hemorrhagic fever, in Bundibugyo District, western Uganda. As of Nov 28, 51 suspected cases, including 16 deaths have been reported. Among the reported cases, 3 health care workers were also infected, including one fatality. The patients are being hospitalized at Kikyo and Bundibugyo. Laboratory analysis undertaken at the National Reference Laboratories and the Centers for Disease Control and Prevention (CDC), Atlanta, USA, has confirmed the presence of a new species of Ebola virus in samples taken from cases associated with the outbreak. Based on initial field investigations, the MoH/WHO Country office has reported that the outbreak might have been ongoing since September 2007. A national task force comprising MoH, WHO and other international partners in the field, is coordinating the response to this outbreak. WHO Country office is assisting the MOH national field team and the District health officials. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

UNDIAGNOSED DEATHS, PNEUMONIC PLAGUE SUSPECTED (Zambia): 30 Nov 2007, A mysterious disease, which broke out in the south of Zambia, killing 4 people, is now suspected to be pneumonic plague, the health ministry said on Nov 30. Ministry of Health spokesman, Canicius Banda, said preliminary findings indicate that the disease that has killed 4 people and affected over 60 patients could be pneumonic plague but the findings were not yet conclusive. "Our preliminary findings point to pneumonic plague," Banda said. A total of 4 people died and 64 others were put under quarantine last week following the outbreak of the disease in Namwala, a small town in the Southern Province of Zambia. Banda said the movement of people in the area had been banned with immediate effect in order to contain the disease, which had symptoms of vomiting and backache. Medical experts had also begun spraying all the houses in the area to get rid of fleas and rodents suspected to be spreading the disease. The government has also urged people in Namwala to be calm after word went round that the disease could be the deadly Ebola virus, prompting panic. "We have carried out the tests and it is not Ebola. People should not panic, the situation is under control," Health minister Brian Chituwo said. Pneumonic plague, which is fatal if left untreated, develops when plague bacteria infect the lungs, and can cause a public health emergency due to its high degree of contagion. (Plague is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

*Cases and outbreaks will be cited for suspect level with regards to suspicion of BT threat. Therefore, cases and

outbreaks will be categorized as "Determined BT", "Suspect" or "Non-suspect".

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

Psittacosis, Duck Exposure (Netherlands): Eurosurveillance Report
This report describes a Dutch case of atypical pneumonia found to be infected with Chlamydophila psittaci, in September 2007, after culling H5N1-positive ducks in Bavaria. Psittacosis, caused by the obligate intracellular bacterial pathogen Chlamydophila psittaci, is listed in Category B on the CDC list of Critical Biological Agents. (http://www.eurosurveillance.org/ew/2007/071129.asp#3)

Outbreak of Salmonella Weltevreden infections in Norway, Denmark and Finland associated with alfalfa sprouts, July-October 2007
This report summarizes an outbreak investigation of Salmonella enterica serotype Weltevreden with cases in Norway, Denmark, and Finland. It was concluded that alfalfa sprouts grown from contaminated seeds were the source of the outbreak in all 3 countries. (http://www.eurosurveillance.org/ew/2007/071129.asp#4)

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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